

What's in the air we breathe?

A Guide to Common Indoor Air Pollutants and Their Health Effects

POLLUTANT NAME & MAXIMUM ALLOWABLE CONCENTRATION	MAJOR SOURCES/CAUSES	POTENTIAL HEALTH EFFECTS
Particulate Matter (PM_{2.5} TSP) <i>Less than 12 µg/m³</i>	Cigarettes, wood/coal stoves, fireplaces, aerosol sprays, dust	Eye/nose/throat irritation, increased susceptibility to respiratory infections and bronchitis, lung cancer
Carbon Dioxide (CO₂) <i>Less than 1,000 ppm</i>	Sick building syndrome (SBS), excessive building occupancy, inadequate ventilation	Fatigue, eye/nose/throat irritation, headaches, chest discomfort, respiratory tract symptoms
Total Volatile Organic Compounds (TVOC) <i>Less than 500 µg/m³</i>	Aerosol sprays, solvents, glues, cleaning agents, pesticides, paints, moth repellents, air fresheners, dry cleaned clothing, water	Eye, nose and throat irritation, headaches, loss of coordination, liver/kidney/brain damage, cancer
Relative Humidity (RH) <i>30-60%</i>	Condensation, oversized HVAC unit, poor building envelope/roof, water leakage, poor moisture control	Respiratory infections, allergies, bacteria/virus transmission, mite/fungal growth
Carbon Monoxide (CO) <i>Less than 9 ppm</i>	Non-vented or malfunctioning gas appliances, wood/coal stoves, tobacco smoke, vehicle exhaust emissions	Headache, nausea, angina, impaired vision/mental functioning, fatal at high concentrations
Ozone (O₃) <i>Less than 0.07 ppm</i>	Malfunctioning air treatment systems, office photocopiers/printers	Eye/nose/throat irritation, coughing, chest discomfort, reduced lung function, shortness of breath
Formaldehyde (CH₂O) <i>Less than 27 ppb</i>	Building materials, tobacco smoke, household products, un-vented fuel-burning appliances (gas stoves, kerosene space heaters)	Watery eyes, eye/nose/throat irritation (burning), coughing, wheezing, nausea, skin irritation